

UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER 2013

TITLE OF PAPER : ANIMAL PHYSIOLOGY

COURSE CODE : B401

TIME ALLOWED : THREE HOURS

INSTRUCTIONS :

1. ANSWER ANY FOUR QUESTIONS
2. EACH QUESTION CARRIES TWENTY FIVE (25) MARKS
3. WHEREVER POSSIBLE ILLUSTRATE YOUR ANSWERS WITH LARGE CLEARLY LABELLED DIAGRAMS

SPECIAL REQUIREMENTS:

1. CALCULATORS (CANDIDATES MAY BRING THEIR OWN)
2. GRAPH PAPER (ORDINARY)

**THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN
GRANTED BY THE INVIGILATORS**

QUESTION 1.

- (a) How is food intake controlled in man? (12 Marks)
(b) Describe and discuss the role of water in human nutrition and metabolism? (13 Marks)

[Total Marks = 25]

QUESTION 2.

Describe any 3 (three) endocrine glands detailing their function and that of their secretions. (25 Marks)

QUESTION 3.

- (a) Differentiate between resting potential and action potential. (10 Marks)
(b) Write notes on the following:
(i) Post-synaptic potentials (5 Marks)
(ii) Conduction speed (5 Marks)
(iii) Electrical synapses (5 Marks)

[Total Marks = 25]

QUESTION 4.

Discuss fully ANY THREE of the following:

- (i) Riboflavin
(ii) Calcium
(iii) Ascorbic acid
(iv) Magnesium
(iv) Vitamin E

(25 Marks)

QUESTION 5.

What is an oxygen dissociation curve? Describe and discuss the factors that determine the positioning of oxygen dissociation curves detailing the advantages (and disadvantages) of the position of an animal's oxygen dissociation curve.

(25 Marks)

QUESTION 6.

- (a) Describe the structure and function of flagella. (10 Marks)
(b) Write out a full discussion on the stimulation and response to stimulation of vertebrate skeletal muscle. (15 Marks)

[Total Marks = 25]